

AMENDMENTS TO THE CLAIMS

1 1-10. (Canceled)

1 11. (Original) A method of determining enforcement security devices in a network
2 topology, the method comprising the computer-implemented steps of:

3 locating a plurality of adjacent nodes in a sequence, the plurality of adjacent nodes
4 being between a source node and a destination node in the network topology,
5 each located node in the sequence having at least two adjacent nodes,
6 including a previous node in the sequence and a next node in the sequence,
7 wherein for each located node in the plurality of adjacent nodes, the next node
8 is different than the previous node;

9 for each located node in the sequence:

10 determining if the located node is the destination node, and if the located node is the
11 destination node, then identifying each node in the sequence as being part of a
12 path closure set between the source node and the destination node;

13 determining if the located node is a loop closure node, and if the located node is a
14 loop closure node, then determining if one or more nodes in the sequence that
15 are part of a loop path defined by the loop closure node are already designated
16 as being part of the path closure set, and

17 if one or more nodes in the sequence that are part of a loop path defined by the loop
18 closure node are already designated as being part of the path closure set, then
19 designating each node in the loop path as part of the path closure set, else

20 designating each node in the loop path as part of the path closure set if at least
21 a designated node in the loop path is subsequently determined to be
22 part of the path closure set.

1 12. (Original) A method as recited in Claim 11, wherein locating a plurality of adjacent
2 nodes in a sequence includes locating each node in the network topology using the sequence.

1 13. (Original) A method as recited by Claim 11, further comprising identifying one or
2 more enforcement security devices from nodes in the path closure set.

1 14. (Original) A method as recited in Claim 11, further comprising identifying one or
2 more enforcement security devices from nodes in the path closure set, and implementing a
3 security policy on the identified one or more enforcement security devices.

1 15. (Original) A method as recited in Claim 11, determining that the located node is a
2 loop closure node includes determining that the located node was located as a next node for
3 at least two other nodes in the sequence.

1 16. (Original) A method as recited in Claim 11, wherein designating each node in the
2 loop path as part of the path closure set if a designated node in the loop path is subsequently
3 determined to be part of the path closure set includes designating each node in the loop path
4 as part of the path closure set if one of the at least two nodes in the sequence that are adjacent
5 to the loop closure node is subsequently determined to be part of the path closure set.

1 17. (Original) A method as recited in Claim 11, wherein locating a plurality of adjacent
2 nodes in a sequence includes locating the plurality of nodes using a depth-first methodology.

1 18-30. (Canceled)

2 31. (New) A computer-implemented method of determining security devices in a network
3 topology, the method comprising:

4 identifying a source node and a destination node for traffic that is to be sent through
5 the network topology;

6 for each particular node in the network topology, adding the particular node to a path

7 closure set for the source node and destination node if the particular node is

8 part of a looping sequence of nodes in which (a) at least one node in the

9 looping sequence is already designated as being part of the path closure set

10 and (b) the at least one node designated as being part of the path closure set is

11 not also a loop closure node for that looping sequence; and

12 storing a list of one or more security devices that occur in the path closure set.

13 32. (New) A computer-implemented method of determining security devices in a network
14 topology, the method comprising:

15 identifying a source node and a destination node for traffic that is to be sent through
16 the network topology;

17 for each particular node in the network topology, adding the particular node to a path

18 closure set for the source node and destination node if the particular node is

19 part of a looping sequence of nodes in which at least one node adjacent to a

20 loop closure node for that looping sequence of nodes is subsequently

21 identified as being part of the path closure set; and

22 storing a list of one or more security devices that occur in the path closure set.

- 1 33. (New) A computer readable medium for determining security devices in a network
2 topology, the computer readable medium carrying instructions for performing the
3 steps of:
4 identifying a source node and a destination node for traffic that is to be sent through
5 the network topology;
6 for each particular node in the network topology, adding the particular node to a path
7 closure set for the source node and destination node if the particular node is
8 part of a looping sequence of nodes in which (a) at least one node in the
9 looping sequence is already designated as being part of the path closure set
10 and (b) the at least one node designated as being part of the path closure set is
11 not also a loop closure node for that looping sequence; and
12 storing a list of one or more security devices that occur in the path closure set.
- 13 34. (New) A computer readable medium for determining security devices in a network
14 topology, the computer readable medium carrying instructions for performing the
15 steps of:
16 identifying a source node and a destination node for traffic that is to be sent through
17 the network topology;
18 for each particular node in the network topology, adding the particular node to a path
19 closure set for the source node and destination node if the particular node is
20 part of a looping sequence of nodes in which at least one node adjacent to a
21 loop closure node for that looping sequence of nodes is subsequently
22 identified as being part of the path closure set; and

1 storing a list of one or more security devices that occur in the path closure set.

2 35. (New) A computer system to determine security devices in a network topology, the
3 computer system comprising:

4 means for identifying a source node and a destination node for traffic that is to be sent
5 through the network topology;

6 means for adding, for each particular node in the network topology, the particular
7 node to a path closure set for the source node and destination node if the
8 particular node is part of a looping sequence of nodes in which (a) at least one
9 node in the looping sequence is already designated as being part of the path
10 closure set and (b) the at least one node designated as being part of the path
11 closure set is not also a loop closure node for that looping sequence; and

12 means for storing a list of one or more security devices that occur in the path closure
13 set.

14 36. (New) A computer system to determine security devices in a network topology, the
15 computer system comprising:

16 means for identifying a source node and a destination node for traffic that is to be sent
17 through the network topology;

18 means for adding, for each particular node in the network topology, the particular
19 node to a path closure set for the source node and destination node if the
20 particular node is part of a looping sequence of nodes in which at least one
21 node adjacent to a loop closure node for that looping sequence of nodes is
22 subsequently identified as being part of the path closure set; and

- 1 means for storing a list of one or more security devices that occur in the path closure
- 2 set.